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THOMAS C. BRITE
December 6, 2005

BRUCE T. BUTLER

Ms. Beth O'Donnell
Executive Director
Public Service Commission
211 Sower Boulevard
P. O. Box 615
Frankfort, KY 40602

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DEC 08 2005

PUBLIC SERVICE
COMMISSION

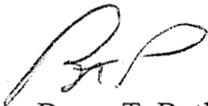
Case No. 2005-00522

Re: Application for "Certificate of Convenience and Necessity"

Dear Ms. O'Donnell:

Enclosed is one (1) original and ten (10) copies of the Application of Meade County RECC for a certificate of convenience and necessity pursuant to KRS 278.020 and 807 KAR 5:001 Section 9 and related sections, authorizing certain proposed construction. Three copies of the 2005 – 2007 work plan with system maps are furnished with this filing.

Very Truly Yours,



Bruce T. Butler, Attorney

Kb

CC: Burns E. Mercer
President / CEO
Meade County RECC
P. O. Box 489
Brandenburg, KY 40108

COMMONWEALTH OF KENTUCKY

BEFORE THE

PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

RECEIVED

DEC 08 2005

PUBLIC SERVICE
COMMISSION

CASE NO. 2005-00522

**THE APPLICATION OF MEADE COUNTY RURAL
ELECTRIC COOPERATIVE CORPORATION
(1)FOR A CERTIFICATE OF CONVENIENCE AND
NECESSITY PURSUANT TO KRS 278.020 (1) AND
807 KAR 5:001 SECTION 9 AND RELATED
SECTIONS, AUTHORIZING CERTAIN PROPOSED
CONSTRUCTION.**

In support of its application, entitled above, Meade County Rural Electric Cooperative Corporation (hereinafter called "Meade County"), respectfully states:

I.

Meade County proposes to construct property for the following purposes:

- a. Distribution lines to serve 1,968 new consumers.
- b. 150 miles of conductor upgrading and replacement.
- c. SCADA
- d. Miscellaneous distribution equipment and pole changes. This includes voltage regulators, capacitors, sectionalizing, meters, transformers, and increased service capacity upgrades.
- e. Security lights.
- f. Automated Meter Reading

No franchise or permits from any public authority are required for the proposed new construction and extensions.

II.

The full name and post office address of the Applicant is as follows:

**MEADE COUNTY RURAL ELECTRIC COOPERATIVE CORPORATION
1351 HIGHWAY SEVENTY-NINE
POST OFFICE BOX 489
BRANDENBURG KY 40108-0489**

III.

Applicant. Meade County is an electric cooperative corporation duly organized and existing under Chapter 279 of the Kentucky Revised Statutes with authority to do all acts hereinafter stated as done or proposed to be done.

A certified copy of the Articles of Incorporation of Meade County has heretofore been filed with this Commission in Case No. 90-134, and reference is respectfully made thereto.

IV.

Meade County, as of December 31, 2004, distributes electric energy to some 26,298 consumers in the Kentucky counties of Breckinridge, Grayson, Hancock, Hardin, Ohio and Meade.

V.

Meade County's property consists of approximately 2,866 miles of electric distribution line and other property necessary and incidental to the operation of its system in the foregoing counties. The original cost of the applicant's property as of December 31, 2004, is as follows:

Total Utility Plant	\$69,398,711.00
---------------------	-----------------

Applicant files herewith the following financial statement:

- A. No amount or kinds of stock are authorized.
- B. No amount or kinds of stock are issued or outstanding.
- C. No preferred stock has been issued or is outstanding.
- D. Exhibit 1 list the outstanding notes and mortgages that have been executed by Meade County as Mortgagor and delivered to the

United States of America, and the National Rural Utilities Cooperative Finance Corporation, as Mortgages as of the date of this application. The balance outstanding, as of December 31, 2004, is shown in Exhibit 1.

- E. No bonds are authorized or issued.
- F. Meade County has no other indebtedness, except current liabilities which accrue in the ordinary course of business and which are unsecured.
- G. No dividends have been paid during the five previous fiscal years.
- H. One hundred percent (100%) of this work plan will be financed with the United States Rural Utilities Services (RUS). Pursuant to KRS 278.300 (10) the Commission's approval of evidences of indebtedness in connection with this loan will not be required.

VI.

It is also stated that the new construction and extension will not compete with any public utility, corporations, or person.

VII.

Estimated costs of operation after the facilities are completed would not change materially from operating costs shown on our December 31, 2004, Statement of Operations included in this filing as Exhibit II, as required by 807 KAR 5:001, Section 9(2) (f).

A copy of the following items are attached herewith and made a part hereof:

1. The 2005-2008 three-year work plan with maps. (Three sets as required under 807 KAR 5:001, Section 9(2) (d).
2. Board of Directors resolution adopting same as a course of action.
3. Statement of operations for the 12 months ending December 31, 2004.

The attached Exhibit List and Exhibits are hereby incorporated by references in this application and made a part hereof.

WHEREFORE, the Applicant, Meade County Rural Electric Cooperative Corporation asks that the Public Service Commission of Kentucky make its order issuing a certificate of convenience and necessity as requested herein, and for such other relief as the Commission may deem appropriate as to which Meade County may appear entitled.

Brite & Butler Attorney at Law

134 Court Square

Hardinsburg KY 40143-0309

Telephone 270-756-2184

Fax 270-756-1214

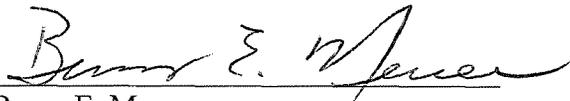
Counsel for Meade County RECC

By:  _____

Bruce T. Butler

VERIFICATION

The undersigned, Burns E. Mercer, being first duly sworn states that he is the President and "Chief Executive Officer Of Meade County Rural Electric Cooperative Corporation; that he has personal knowledge of the matters set forth in the foregoing application; and that the statements contained therein are true and correct to the best of his knowledge, information and belief.


Burns E. Mercer

State of Kentucky
County of Meade

Subscribed, sworn to and acknowledged before me by BURNS E.
MERCER this 6th day of December 2005

My commission expires 3-18-08


Notary Public, State of Kentucky at Large

(seal)

EXHIBIT LIST

<u>Number</u>	<u>Description</u>
I	List of Loans outstanding as of December 31, 2004
II	December 31, 2004, Statement of Operations
III	Balance Sheet as of December 31, 2004
IV	Resolution of the Board of Directors adopting the 2005 –2007 three-year work plan as a course of action.
Separate Cover	2005 – 2007 three-year work plan with system maps and voltage drop studies. Three copies included with this filing.

Meade County Rural Electric Cooperative Corporation
Long-term Debt to RUS, CFC, and FFB
December-04
Exhibit 1

<u>Note No.</u>	<u>Interest Rate</u>	<u>Date</u>	<u>Original Balance</u>	<u>Principal Payments</u>	<u>Long Term Debt CFC & Other</u>
9001	3.900%	9/11/1972	76,000.00	60,659.12	15,340.88
9002	7.000%	7/22/1974	276,000.00	194,394.17	81,605.83
9005	3.050%	2/10/1976	276,000.00	169,795.02	106,204.98
9007	3.900%	6/23/1977	287,000.00	157,010.26	129,989.74
9009	3.050%	6/6/1978	287,000.00	145,788.18	141,211.82
9011	3.050%	9/20/1979	753,000.00	348,937.91	404,062.09
9015	6.550%	1/26/1982	533,000.00	198,820.53	334,179.47
9016	3.900%	11/20/1986	794,000.00	210,091.83	583,908.17
9017	3.050%	8/24/1989	803,000.00	174,890.05	628,109.95
9019	3.900%	3/19/1992	901,000.00	151,959.07	749,040.93
9020	6.550%	2/17/1994	1,361,000.00	148,999.94	1,212,000.06
9021	6.900%	6/2/1997	1,906,000.00	115,551.16	1,790,448.84
Conversion Fees for Note #'s					
9005, 9007, 9015, 9016, 9017			118,355.19	118,355.19	0.00
9022001	2.800%	8/29/2003	1,468,511.07	1,468,511.07	0.00
9022002	2.800%	8/29/2003	1,468,511.07	0.00	1,468,511.07
9022003	3.100%	8/29/2003	1,468,511.07	0.00	1,468,511.07
9022004	3.550%	8/29/2003	1,468,511.07	0.00	1,468,511.07
9022005	4.050%	8/29/2003	1,468,511.07	0.00	1,468,511.07
9022006	4.800%	8/29/2003	1,468,511.07	0.00	1,468,511.07
9022007	3.900%	8/29/2003	1,468,511.07	0.00	1,468,511.07
9022008	3.900%	8/29/2003	1,468,511.07	0.00	1,468,511.07
9022009	3.900%	8/29/2003	1,468,511.07	0.00	1,468,511.07
9022010	3.900%	8/29/2003	1,468,511.15	0.00	1,468,511.15
Total CFC			23,056,465.97	3,663,763.50	19,392,702.47
RUS					Long Term Debt RUS
0B180	2%	3/27/1972	150,500.00	133,570.69	16,929.31
0B182	2%	3/27/1972	150,500.00	133,575.64	16,924.36
1A290	4.50%	8/31/1997	1,000,000.00	55,334.06	944,665.94
1A291	4.50%	9/22/1997	1,224,500.00	67,756.62	1,156,743.38
1A295	4.87%	5/31/1998	2,224,500.00	175,230.31	2,049,269.69
1A310	4.67%	5/27/2004	2,557,000.00	0.00	2,557,000.00
1A311	4.18%	9/9/2004	3,000,000.00	0.00	3,000,000.00
Plus original notes fully paid			27,071,042.00	27,071,042.00	0.00
Total RUS			37,378,042.00	27,636,509.32	9,741,532.68
FFB					Long Term Debt FFB
F0010	6.049%	10/24/1991	540,000.00	125,959.17	414,040.83
F0015	2.112%	9/26/2000	1,300,000.00	78,679.91	1,221,320.09
F0020	2.707%	2/15/2001	2,000,000.00	111,464.56	1,888,535.44
F0025	3.250%	2/15/2001	2,000,000.00	103,319.80	1,896,680.20
F0030	2.815%	10/1/2002	5,418,000.00	251,949.60	5,166,050.40
Total FFB			11,258,000.00	671,373.04	10,586,626.96
Total Long-Term Debt			71,692,507.97	31,971,645.86	39,720,862.11
Less: Advance Payments Unapplied (Note #4990)					764,670.05
Total Long-Term Debt					\$38,956,192.06

MEADE COUNTY RURAL ELECTRIC COOPERATIVE CORPORATION
BALANCE SHEET
12 MONTHS ENDED DECEMBER 31, 2004
EXHIBIT III

ASSETS:

Electric Plant, at original cost:	
In Service	\$67,740,660
Construction work-in-progress	<u>1,658,051</u>
Less Accumulated depreciation	16,671,894
Net Electric Plant	<u>52,726,817</u>
Investments, at cost	1,801,919
Current Assets:	
Cash and cash equivalents	3,951,632
Accounts receivable, less allowance for doubtful accounts	2,769,795
Material & supplies, at average cost	342,614
Prepayments	129,670
Other current assets	<u>9,990</u>
Deferred charges	183,691
TOTAL ASSETS	<u><u>\$61,916,128</u></u>

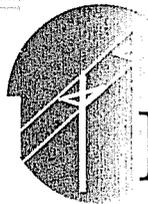
MEMBERS' EQUITIES AND LIABILITIES

Members' Equities:	
Memberships	\$127,250
Patronage Capital	18,428,266
Other equities	<u>653,321</u>
Total members' equities	19,208,836
Long-Term Debt	38,956,192
Current Liabilities:	
Accounts payable	1,792,626
Accrued expenses	<u>1,087,063</u>
Total current liabilities	2,879,690
Noncurrent Liabilities:	
Accumulated Operating Provisions	
Consumer Advances for Construction	358,307
Deferred Credits	513,104
TOTAL MEMBERS' EQUITIES AND LIABILITIES	<u><u>\$ 61,916,128</u></u>

MEADE COUNTY RURAL ELECTRIC COOPERATIVE CORPORATION
STATEMENT OF OPERATIONS
12 MONTHS ENDED DECEMBER 31, 2004
EXHIBIT II

STATEMENT OF OPERATIONS

OPERATING REVENUE & PATRON CAPITAL	\$25,968,656
COST OF POWER	14,875,527
DISTRIBUTION EXPENSE-OPERATIONS	1,502,826
DISTRIBUTION EXPENSE-MAINTENANCE	2,398,443
CONSUMER ACCOUNTS EXPENSE	1,137,419
CUSTOMER SERVICE & INFORMATION EXPENSE	195,676
SALES EXPENSE	2,405
ADMINISTRATIVE & GENERAL EXPENSE	<u>1,123,205</u>
TOTAL OPERATION & MAINTENANCE EXPENSE	21,235,500
DEPREC & AMORT EXP	2,176,161
TAX EXPENSE-PROPERTY	
TAX EXPENSE-OTHER	26,748
INTEREST ON LTD	1,404,391
INTEREST CHG CONST-CREDIT	
INTEREST EXP-OTHER	27,366
OTHER DEDUCTIONS	<u>14,940</u>
TOTAL COST OF ELECTRIC SERVICE	24,885,105
PATRONAGE CAPITAL AND OPERATING MARGINS	1,083,551
NON-OPERATING MARGINS-INTEREST	105,104
ALLOWANCE FOR FUNDS USED DURING CONST	
INCOME (LOSS) FROM EQUITY INVESTMENTS	
NON-OPERATING MARGINS-OTHER	5,720
GEN AND TRANS CAPITAL CREDITS	
OTHER CAPITAL CREDITS & PATRONAGE DIVIDENDS	112,500
EXTRAORDINARY ITEMS	<u> </u>
PATRONAGE CAPITAL OR MARGINS	<u>\$1,306,875</u>



Meade County RECC

P.O. Box 489
Brandenburg, KY 40108-0489
(270) 422-2162
Fax: (270) 422-4705

EXCERPT FROM MINUTES DATED SEPTEMBER 28, 2005

RESOLUTION

“WHEREAS, a Three-year Construction Work Plan dated 2005-2008 in the amount of \$16,318,647 has been prepared by Distribution System Solutions, Inc.

“NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of Meade County Rural Electric Cooperative Corporation hereby approves the 2005-2008 Work Plan as a plan of action, to be followed, or until amended with the approval of RUS.”

CERTIFICATE OF SECRETARY

I, Darla Sipes, Secretary of Meade County Rural Electric Cooperative Corporation hereby certify that the foregoing is a true and correct copy of an excerpt taken from the minutes of a regular meeting of the Board of Directors held on September 28, 2005.

Signature of Secretary

2005-2008 Construction Work Plan Report

RECEIVED

DEC 08 2005

PUBLIC SERVICE
COMMISSION

Meade County Rural Electric Cooperative Corporation

Kentucky 18 Meade

Brandenburg, Kentucky

Prepared by:

Distribution System Solutions, Inc.
Walton, Kentucky

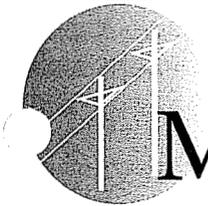
October 2005

I hereby certify that this 2005-2008 Construction Work Plan Report was prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the State of Kentucky. Registration No. 16457



August 29, 2005
Date

By: James D. Bridges, P.E.
James D. Bridges, P.E.



Meade County RECC

P.O. Box 489
Brandenburg, KY 40108-0489
(270) 422-2162
Fax: (270) 422-4705

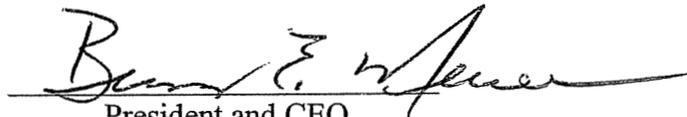
July 2005

ENVIRONMENTAL REPORT

KY 18

2005-2008 Construction Work Plan

The projects in this work plan consist of code 300 line conversions and conductor replacements only.


President and CEO

**MEADE COUNTY RURAL ELECTRIC COOPERATIVE
CORPORATION
2005 – 2008 CONSTRUCTION WORK PLAN REPORT**

Kentucky 18 Meade

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I. EXECUTIVE SUMMARY

- A. Purpose, Results and General Basis of Study.
- B. Service Area and Power Supply.
- C. Summary of Construction Program and Costs.

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- A. Distribution System Design Criteria.
- B. Distribution and Line Equipment Costs.
- C. Status of Previous CWP Items.
- D. Analysis of System Studies.
- E. Analysis of Substation Loading and System Reliability.

III. DATA RESOURCES AND ASSUMPTIONS

- A. Data Resources.
- B. Basic Data and Assumptions, Historical Data/Cost Summary.

IV. PROPOSED CONSTRUCTION ITEMS

- A. Service to New Customers.
- B. System Improvements (Includes Conductor Replacement).
- C. Miscellaneous Distribution Equipment.
- D. Security Lights, Automated Meter Reading and SCADA.

APPENDICES

- A. Economic Conductor Analysis.

PROJECT MAPS

PURPOSE OF REPORT

This report documents the engineering analysis of, and summarizes the proposed construction for Meade County Rural Electric Cooperative Corporation's (MCRECC) electric distribution system for the three-year planning period of 2005-2008.

The report also provides engineering support in the form of descriptions, costs and justifications of the required new facilities for a loan application to RUS in order to finance the proposed construction program.

RESULTS OF PROPOSED CONSTRUCTION

Upon completion of the proposed construction, the system will provide adequate and dependable service to 28,350 active customers including 1,750 small commercial loads. Average monthly system usage is projected to be 1,323 kWh. It is estimated that there will be 2,000 idle services.

GENERAL BASIS OF STUDY

The January 2008 projected number of customers, the total peak system load, the historical data and future projections - shown below - were all based upon the MCRECC 2005 Load Forecast (LF) as approved by RUS. Residential and small commercial loads were grown at rates consistent with the LF. Large power loads were allocated on a site-specific basis.

System analysis models are based on projected, system peaks. These peaks are shown in the LF as coincidental. Coincidence factors are used to determine the projected NC system load. The projected winter 2008 NC peak is 117,000 kW. The annual peak load factor is projected to average 49.0%.

The MCRECC 2002 Long Range Plan (LRP) load projections and improvement recommendations were reviewed and they generally agree with the scope of the 2005-2008 CWP recommendations.

A RUS Operations and Maintenance Survey (FORM 300) was completed with the RUS GFR. This survey is used to determine portions of the construction required to replace physically deteriorated equipment and material, upgrade areas of the system to conform to code or safety requirements, and improve the reliability and quality of service.

An analysis using RUS guidelines and the MCRECC Design Criteria was performed on all of the substations and distribution lines of the system. Milsoft Integrated Solutions' PC-Based Distribution Analysis Program -- "Windmil" Version 5.4 was used to analyze the existing system configuration that was modeled with the projected load growth.

For each deficiency that was found, alternate solutions were considered and economically evaluated.

Generation and Transmission Power Supplier

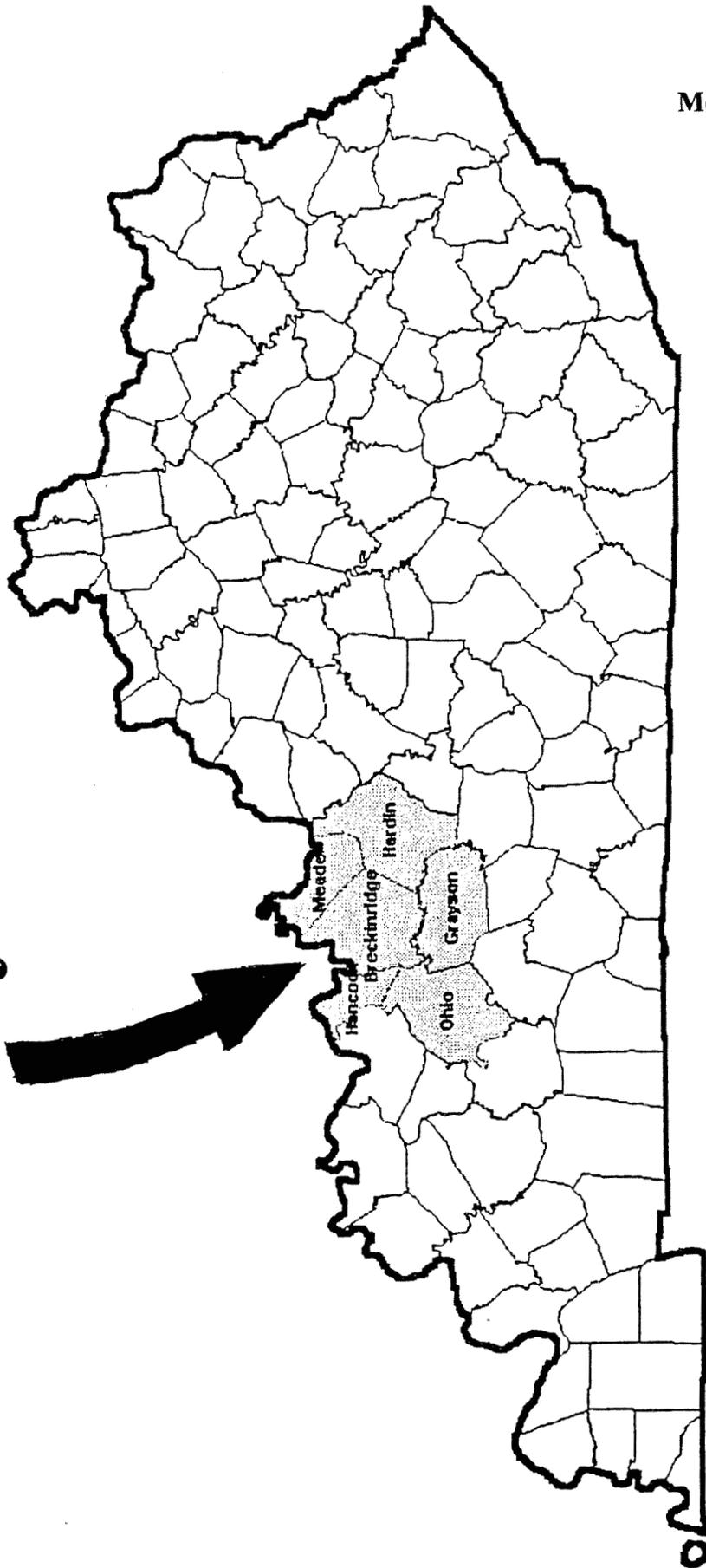
Big Rivers Electric Corporation (BREC) provides all power and energy needs to MCRECC and two other distribution cooperatives. BREC is located in Henderson, Kentucky. New distribution, transmission, and substation construction requirements are considered simultaneously as a "one system" concept -- between MCRECC & BREC - for the orderly and economical development of the total system. All recommendations relative to power supply and delivery are discussed with BREC.

SERVICE AREA

Meade County Rural Electric Cooperative Corporation (MCRECC) provides service to customers located in Breckinridge, Grayson, Hancock, Hardin, Meade, and Ohio Counties in northwestern Kentucky. MCRECC purchases power from the Big Rivers Electric Corporation (BREC) at 16 delivery points and distributes it at a primary voltage of 12.5/7.2 kV over approximately 2,870 miles of lines.

The area (*see map on following page*) is adjacent to the southwest of Louisville, Kentucky. A large percentage of customers are residential. Several industries and the proximity to Louisville contribute to the growing residential population. The Rough River Dam recreational area continues to grow.

Meade County RECC



SUMMARY OF CONSTRUCTION PROGRAM AND COSTS

MCRECC's distribution system was analyzed in order to identify the construction requirements needed to adequately serve the projected CWP load of 117 MW. Improvements were identified based on voltage drop, conductor loading, system reliability improvement, economic conductor analysis and operational experience. A narrative list of system improvements is located in section IV.

A breakdown of proposed construction projects by RUS 740C codes is listed below in Table I-C-1.

**Table I-C-1
System Additions and Improvements Summary**

RUS Form 740C Category	Category Name	Estimated Cost
100	New Distribution Line	\$3,640,800
300	Line Conversion & Replacement	\$5,330,619
400	New Substations	\$0
500	Substation Upgrades	\$0
600	Misc. Equip & Poles	\$6,192,029
700	Security Lights, AMR & SCADA	\$1,155,199
	2005-2008 CWP TOTAL	\$16,318,647

100 – New Construction planned to serve 1,968 new customers.

300 – 150 miles of conductor upgrading and replacement.

400 – No new substations are projected during the CWP period.

500 – No substation upgrades are projected during the CWP period.

600 – Miscellaneous distribution equipment and pole changes. This includes voltage regulators, capacitors, sectionalizing, meters, transformers, increased service capacity upgrades.

700 – Other Distribution Items. Security Lights 701, AMR 702, SCADA 703.

MEADE COUNTY RECC 2005-2008 CWP
COST SUMMARY SPREADSHEET

NEW CONSTRUCTION -- RUS CODE 100

ITEM	RUS CODE	AVE \$/CONSUMER	# CONS.	05/06	06/07	07/08	TOTAL
New Services	100	\$1,850	1968	\$1,180,800	\$1,213,600	\$1,246,400	\$3,640,800
		TOTAL CODE 100:					

LINE CONVERSION / REPLACEMENT - RUS CODE 300

SUB - SECTION	RUS CODE	CONDUCTOR	\$/MILE	MILES	05/06	06/07	07/08	TOTAL
Brandenburg - Bypass	350	#2 ACSR-1φ & 3/0 ACSR-3φ	\$29,412	1.7	\$50,000			\$50,000
Andyville - 301, 302, 303 Knob Rd	351	6A-1φ to #2 ACSR-1φ	\$25,900	8.3	\$214,970			\$214,970
Andyville - 282, 289 Rhodes Rd	352	6A-1φ to #2 ACSR-1φ	\$25,900	3.4	\$88,060			\$88,060
Andyville - 292 Concordia Rd	353	6A-1φ to #2 ACSR-1φ	\$27,700	3.3	\$91,410			\$91,410
Cloverport - 151 Flood Cut Rd	354	8A-1φ to #2 ACSR-1φ	\$27,700	4.5	\$124,650			\$124,650
Cloverport - 4915 Iron Ore Hill Rd	355	6A-1φ to #2 ACSR-1φ	\$27,700	1.5	\$41,550			\$41,550
Cloverport - 150 New Water Station	392	6A-3 phase to #3/0 ACSR	\$63,530	3.5	\$222,355			\$222,355
Cloverport - 131 Balltown	356	6A-1φ to #2 ACSR-1φ	\$27,700	4.5	\$124,650			\$124,650
Cloverport - 4023, 138 Tar Springs	375	8A-1φ to #2 ACSR-1φ	\$26,800	5.6	\$150,080			\$150,080
Custer- 254 High Plains	357	8A-1φ to #2 ACSR-1φ	\$25,900	1.6	\$41,440			\$41,440
Custer - 235 Fairfield/Buras	358	8A-1φ to #2 ACSR-1φ	\$27,700	3.3	\$91,410			\$91,410
Falls of Rough - 629 Panamore Shores	359	8A-1φ to #2 ACSR-1φ	\$25,900	3.0	\$77,700			\$77,700
Falls of Rough - 846 South 79	360	8A-1φ to #2 ACSR-1φ	\$26,800	2.8	\$75,040			\$75,040
Falls of Rough - 570 Paradise Acres	361	6A-1φ to #2 ACSR-1φ	\$26,800	1.7	\$45,560			\$45,560
Falls of Rough - 508 Pleasant Run	362	8A-1φ to #2 ACSR-1φ	\$26,800	1.0	\$26,800			\$26,800
<i>Falls of Rough - 71, 807* Duff</i>	363	#2 ACSR-1φ to 3/0 ACSR-3φ	\$63,530	3.3	\$209,649			\$209,649
Flaherty - 4032, 245, 448 Big Springs	364	8A-1φ to #2 ACSR-1φ	\$25,900	2.4	\$62,160			\$62,160
Fordsville - 38, 544, 31 Hwy 261	365	4A-3φ to 3/0 ACSR-3φ	\$63,530	7.0	\$444,710			\$444,710
Fordsville - 766, 767, 20 Fordsville	366	8A-1φ to #2 ACSR-1φ	\$26,800	7.0	\$187,600			\$187,600
Fordsville -50 Mathews Lane	367	6A-1φ to #2 ACSR-1φ	\$27,700	2.7	\$74,790			\$74,790
Fordsville - 4024, 46 Hites Falls	368	6A-1φ to #2 ACSR-1φ	\$27,700	3.5	\$96,950			\$96,950
Fordsville - 16 Keown Rd	369	6A-1φ to #2 ACSR-1φ	\$27,700	3.3	\$91,410			\$91,410
Fordsville - 13 G. Dalton Road	370	6A-1φ to #2 ACSR-1φ	\$27,700	5.5	\$152,350			\$152,350
Hardinsburg #1 - 168 New Bethel Rd	372	6A-1φ to 3/0 ACSR-3φ	\$65,750	2.5	\$164,375			\$164,375
Hardinsburg #1 - City Lake Dbl Ckt.	373	DC 4A-3φ to DC 3/0 ACSR-3φ	\$84,267	2.9	\$244,375			\$244,375
Hardinsburg #1 - 178 Nortons Valley	374	8A-1φ to #2 ACSR-1φ	\$27,700	4.2	\$116,340			\$116,340
Hardinsburg #2 - 212, 155 N Hwy 105	376	8A-1φ to #2 ACSR-1φ	\$27,700	5.5	\$152,350			\$152,350
Harned - 994, 187 Freedom Church	377	8A-1φ to #2 ACSR-1φ	\$25,900	9.5	\$246,050			\$246,050
Ivington - 408, 487 Newton Rd	378	8A-1φ to #2 ACSR-1φ	\$27,700	1.7		\$47,090		\$47,090

LINE CONVERSION / REPLACEMENT - RUS CODE 300 (CONT.)

SUB - SECTION	RUS CODE	CONDUCTOR	\$/MILE	MILES	05/06	06/07	07/08	TOTAL
Irvington - 733, 247 Bewleyville	379	8A-3φ to 3/0 ACSR-3φ	\$65,750	3.0		\$197,250		\$197,250
Irvington - 411, 409 Guston Dumpline	380	8A-1φ to #2 ACSR-1φ	\$27,700	4.6			\$127,420	\$127,420
Irvington - 519, 521 Homer Richardson	381	8A-1φ to #2 ACSR-1φ	\$26,800	7.1		\$190,280		\$190,280
Irvington - 383, 384, 386 Fackler Rd	382	4A-3φ to 3/0 ACSR-3φ	\$65,750	5.1		\$335,325		\$335,325
Irvington - 526 Mt. Merino	383	6A-1φ to #2 ACSR-1φ	\$26,800	2.0		\$53,600		\$53,600
McDaniels - 791 Ben Johnson D.C.	385	3/0 ACSR-3φ to DC 3/0 ACSR-3φ	\$80,000	3.6		\$288,000		\$288,000
McDaniels - 568 Tucker Holmes Rd	386	8A-1φ to #2 ACSR-1φ	\$26,800	2.1		\$56,280		\$56,280
McDaniels - 105 Hidden Valley Rd	387	8A-1φ to #2 ACSR-1φ	\$27,700	2.3			\$63,710	\$63,710
McDaniels - 662 Mills Mercer Camp	388	6A-1φ to #2 ACSR-1φ	\$26,800	0.3		\$8,040		\$8,040
McDaniels - 103 Sewsbury Rd	389	6A-1φ to #2 ACSR-1φ	\$27,700	3.1			\$85,870	\$85,870
Union Star - 513, 285 Cart Manning	391	6A-1φ to #2 ACSR-1φ	\$27,700	6.1			\$168,970	\$168,970
		TOTAL CODE 300:		150.0	\$1,657,094	\$2,022,605	\$1,650,920	\$5,330,619

* -CARRYOVER ITEM

NOTE: "300" Project Code Numbers may be out of sequence

MISCELLANEOUS DISTRIBUTION EQUIPMENT - RUS CODE 600'S

ITEM	RUS CODE	3 YR. AVE. COST	# ITEMS	05/06	06/07	07/08	TOTAL
New Transformers	601	\$735	2250	\$532,500	\$551,250	\$570,000	\$1,653,750
New Meters	601	\$114	15054	\$570,213	\$570,213	\$570,213	\$1,710,639
Service Upgrades	602	\$1,240	72	\$28,800	\$29,760	\$30,720	\$89,280
Sectionalizing	603			\$110,000	\$114,000	\$118,000	\$342,000
Voltage Regulators	604			\$65,600	\$0	\$0	\$65,600
Capacitors	605			\$12,000	\$0	\$0	\$12,000
Pole Changes -Including Clearance	606	\$1,140	2034	\$745,800	\$772,920	\$800,040	\$2,318,760
		TOTAL					
		MISC. CODE 600'S:		\$2,064,913	\$2,038,143	\$2,088,973	\$6,192,029

OTHER DIST. ITEMS - RUS CODE 700

ITEM	RUS CODE	3 YR. AVE. COST	# ITEMS	05/06	06/07	07/08	TOTAL
Security Lights	701	\$475	1512	\$231,840	\$239,904	\$246,960	\$718,704
Automated Meter Reading	702			\$112,165	\$112,165	\$112,165	\$336,495
SCADA	703			\$33,333	\$33,333	\$33,334	\$100,000
		TOTAL CODE 700:					\$1,155,199

2005-2008 Kentucky 18 - Meade

CONSTRUCTION WORK PLAN TOTAL:

\$16,318,647

DISTRIBUTION SYSTEM DESIGN CRITERIA

Construction projects proposed herein are required to meet the following minimum standards of adequacy for voltage, thermal loading, safety, and reliability on the system:

- 1) The minimum voltage on primary distribution lines is 118 volts (120 volt base, 126 volts at source) after re-regulation.
- 2) Primary conductors are not to be loaded over 75% of their thermal rating.
- 3) The following equipment will not be thermally loaded by more than the percentage shown of its nameplate rating:
 - a) 100% - Power Transformers
 - b) 100% - Voltage Regulators
 - c) 100% - Step Transformers
 - d) 70% - Reclosers
 - e) 70% - Line Fuses
- 4) Conversions of single phase to multiphase to correct voltage drop and phase balance will be considered as appropriate. Single-phase lines with a load exceeding 50 amps will be considered for multiphasing. Operating and engineering practices used to develop this loading criteria are based on a single-phase line interruption that may cause operation of the ground trip on three phase oil circuit reclosers. This is due to a 50 ampere unbalance that can be more than doubled during cold load pickup.
- 5) Conductors (and associated poles and hardware as required) will be considered for replacement on a systematic basis and/or other outage reports.
- 6) Primary conductor sizes to be considered using the Economic Conductor Analysis.
- 7) All new distribution lines to be designed and built according to RUS standard construction specifications and guidelines.
- 8) It is recommended that proposed construction items required for voltage improvements, based solely on calculated voltage from computerized circuit analysis printouts, not be authorized for construction until such calculated voltages are measured in the field.

DISTRIBUTION LINE AND EQUIPMENT COSTS

Construction cost estimates for the three year planning period are shown in Table II-B-1. Cost summaries for distribution equipment are shown in Table II-B-2.

**Table II-B-1
Line Construction Cost Estimates
Annual Projected Dollars/Mile**

SIZE	TYPE	2006	2007	2008
#2 ACSR	CONV 3-PH	\$51,100	\$52,900	\$54,700
1/0 ACSR	CONV 3-PH	\$52,000	\$55,900	\$57,900
3/0 ACSR	CONV 3-PH	\$63,530	\$65,750	\$68,000
336.4 ACSR	CONV 3-PH	\$70,500	\$73,000	\$75,500
#2 ACSR	CONV 2-PH	\$37,000	\$38,300	\$39,600
#2 ACSR	CONV 1-PH	\$25,900	\$26,800	\$27,700
1/0 ACSR	CONV 1-PH	\$29,900	\$30,900	\$32,000

**Table II-B-2
Distribution Equipment Cost Estimates
Annual Projected Unit Costs**

DEVICE	TYPE	2006	2007	2008
V.Regulators (3)	100 amp	\$28,600	\$29,600	\$30,600
V.Regulators (3)	150 amp	\$30,900	\$32,000	\$33,100
V.Regulators (3)	219 amp (167)	\$32,800	\$33,900	\$35,100
V.Regulators (3)	328 amp (250)	\$37,700	\$39,000	\$40,300
V.Regulators (1)	50 amp	\$8,800	\$9,100	\$9,400
300 kVAR Capacitors	3-ph w/ cont.	\$5,000	\$5,175	\$5,350
600 kVAR Capacitors	3-ph w/ cont.	\$5,500	\$5,700	\$5,900
300 kVAR Capacitors	3-ph fixed	\$2,300	\$2,380	\$2,460
600 kVAR Capacitors	3-ph fixed	\$2,850	\$2,950	\$3,050
Reclosers	3-ph Elect.	\$21,000	\$21,700	\$22,500
Reclosers	1-ph OCR	\$2,400	\$2,500	\$2,600

STATUS OF 2002-2004 CWP ITEMS

CWP #	Description	Completed	Deleted	Carryover
301	Stoney Point	✓		
302	Hwy 886	✓		
303	N. Sirocco	✓		
304	Greer Road	✓		
305	Midway/Payneville	✓		
306	Pine Ridge Road		✓	
307	Green Valley Ranch		✓	
308	Fackler/Brown	✓		
309	New Clover Creek	✓		
310	East Cloverport	✓		
311	West Cloverport	✓		
312	South Cloverport	✓		
313	East Doe Valley	✓		
314	Duff Rd			✓
315	Falls Rough Sub.	✓		
316	Hwy 79	✓		
317	Stith Valley	✓		
318	Carter Farm	✓		
319	Hwy 1600	✓		
320	Sandy Ridge Rd		✓	
321	Flaherty Heights	✓		
322	Hwy 144		✓	
323	Woodland Rd	✓		
324	Hill Grove	✓		
325	Ekron/Fashion floors	✓		
326	Medley Farm	✓		
327	Shircliff Rd	✓		
328	Rosewood Estates	✓		
329	Robbins Estates	✓		
330	Hwy 144 (Bypass)		✓	
331	Hwy 144 (State)		✓	
332	Hwy 144 (State)		✓	
333	US 60	✓		
334	Kingswood	✓		
335	Cemetery Hill Rd	✓		
336	Irvington/Guston	✓		
337	Webster/Lodiburg			✓(reimbursement)

STATUS OF 2002-2004 CWP ITEMS

338	Hardesty Raymond	✓		
339	Clifton Mills	✓		
340	Lee Miller Rd	✓		
341	Stephensport	✓		
342	Union Star	✓		
343	Cook Ridge (mystic)			✓(reimbursement)
344	Cook Ridge (Walnut Grove)	✓		
345	Shreve Rd			✓(reimbursement)
346	Locust Hill/Buras	✓		
347	St. Mary's Church	✓		
348	Silas Miller Rd	✓		

400	N/A			
520	Cloverport Sub to 10MVA	✓		
521	Irvington Sub to 14MVA	✓		
522	Battletown Recloser	✓		
523	Battletown Sub	✓		
524	Garrett Sub (2) 14 MVA units	✓		
525	Union Star to 5MVA	✓		
604.1	Flaherty Regs.	✓		
604.2	Irvington Regs.	✓		
605.1	Fordsville Caps	✓		
605.2	Harned Caps	✓		
605.3	Flaherty Caps	✓		
606	Pole Changes	✓		
701	Security Lights	✓		
704	AMR	4 out of 16 Subs Done		1 in progress

ANALYSIS OF LONG RANGE PLAN

A Long Range Plan (LRP) update was completed in 2002.

The 2002 LRP projects two new substations.

Salem- This station, near Ekron, will relieve projected transformer overloading on Brandenburg I and Brandenburg II substations. It is projected for sometime in the next two CWP periods. No activity is needed for this substation during this CWP period.

Sand Hill- This substation, due north of Irvington, will relieve loading on the Irvington and Union Star substations. Construction on this substation is not projected to begin for another ten years.

Extensive copper replacement is scheduled in the 2002 LRP.

The LRP was developed using four three-year load blocks. These blocks are intended to loosely coincide with future three-year construction work plan reports. In ***summary***, the 2005-2008 Construction Work Plan is in basic agreement with the 2002 LRP.

OPERATIONS & MAINTENANCE SURVEY

The current O&M Survey (“Review Rating Summary”) was completed in August 2004. A copy of the survey is included in the Appendix of this report.

One-half of the MCRECC system is personally patrolled and inspected bi-annually. This results in the entire overhead system being visually inspected every two years. As a result, many maintenance and right-of-way items are found, documented, and corrected after each patrol.

A contractor is utilized to inspect and treat some selected three-phase pole routes.

Rust was noted on some substation fences and steel structures.

Telephone systems should transfer and retire old poles in joint-use situations. CATV attachments require follow-up to ensure code compliance.

A 5-year right-of-way cycle is being maintained for the rural area of the system. In the town areas, a 3-year cycle is maintained. 500 miles per year are trimmed. Additional steps in right-of-way clearing will be taken.

The Sectionalizing Study will be updated on a substation-by-substation basis.

SECTIONALIZING STUDIES

A sectionalizing study analyzes the existing overcurrent protection scheme and proposes changes to improve the overall effectiveness of the scheme.

Sectionalizing studies take place on a substation-by-substation basis.

The four main goals of a sectionalizing study are Safety, Coordination, Protection, and Reliability.

1. Safety – Protective devices should be able to detect the full range of fault currents available in their zone of protection coverage. Calculated minimum fault current values (Using RUS Bulletin 61-2) should be detected and cleared by the protective device.
2. Coordination – Good protective device coordination will ensure that the closest device to the fault opens. Fault locating is also enhanced. Miscoordination of protective devices can cause confusion and ultimately add to outage times.

3. Protection – A well designed protection scheme will minimize damage to the distribution system by limiting the time that damaging overcurrent is present on the faulted portion of the system.
4. Reliability – Limit the outage hours per consumer by isolating or “sectionalizing” faulted portions of the circuit so that the minimum number of customers are interrupted. Additional devices – where needed – will further limit the overall outage hours.

Changes that can affect the coordination scheme include: load growth; substation transformer capacity increases; reconductoring distribution lines; single-phase to three-phase conversions; changes in the system’s circuit configuration; and the addition of loads in specific locations.

Protective device cost projections will be listed in the “603” category in this report.

**TABLE II-E-1
SUBSTATION LOAD**

**HISTORICAL LOAD IN kVA
FORECASTED LOAD IN kVA**

SUBSTATION	Base kVA/FA kVA	Jan-05	Jul-04	%LOAD Jan-05	Jan-08	% Improved-08	NOTES
Andyville	5000/7000	3,710	3,203	53%	3,952	56%	
Battletown	7500	2,932	2,806	39%	3,102	41%	
Brandenburg 1	7500/9375	8,234	6,234	88%	9,200	98%	1
Brandenburg 2	7500/9375	5,648	4,420	60%	6,551	70%	
Cloverport	10000/14000	3,846	4,334	27%	4,192	30%	
Custer	5000/6250	5,374	3,758	86%	6,108	98%	2
Doe Valley	7500/10500	7,868	5,262	75%	9,218	88%	
Falls of Rough	10000/14000	4,822	4,913	34%	5,661	40%	
Flaherty	10000/14000	11,328	7,849	81%	13,272	95%	
Fordsville	7500/9375	6,606	6,106	70%	7,399	79%	
Garrett	10000/14000	10,973	7,391	78%	11,353	81%	
Hardinsburg 1	7500/9375	5,537	6,684	59%	6,073	65%	
Hardinsburg 2	7500/9375	3,884	4,121	41%	4,477	48%	
Harned	5000/7000	4,920	4,964	70%	5,206	74%	
Irvington	10000/14000	8,765	8,198	63%	10,237	73%	
McDaniels	10000/14000	8,887	8,890	63%	9,110	65%	
Union Star	5000/6500	3,535	2,990	54%	3,743	58%	

NOTES

1. Transformer Upgrade or new substation early in next CWP period.
2. Transformer Upgrade early in next CWP period.

SERVICE RELIABILITY

The record of Meade County RECC's service interruptions for the past five years is shown in Table II-E-2. The five-year average outage hours per consumer was **9.81**.

2004 outages greatly skewed that data – due to major storm activity.

TABLE II-E-2

	POWER SUPPLY	EXTREME STORM	PRE- ARRANGED	ALL OTHER	TOTAL
2000					
OUTAGE HR/CONS	0.70	0.45	0.09	1.29	2.53
2001					
OUTAGE HR/CONS	0.07	0.43	0.05	0.89	1.44
2002					
OUTAGE HR/CONS	0.46	0.84	0.05	1.23	2.58
2003					
OUTAGE HR/CONS	0.11	0.97	0.04	0.71	1.83
2004					
OUTAGE HR/CONS	13.02	26.60	0.06	0.99	40.67
FIVE YEAR AVE.					
OUTAGE HR/CONS	2.87	5.86	0.06	1.02	9.81

DATA RESOURCES

The following is a list of the basic data used for this analysis and report.

1. Updated primary map indicating the following items:
 - a) Substations with present feeder configurations.
 - b) All open points.
 - c) Transmission lines.
2. Monthly substation non-coincident peak(NCP) demands for the past year and annual system peaks as obtained from the *Load Forecast*.
3. Billing system kWh and kW sales for last winter and summer peaks.
4. Present Big Rivers Electric Corporation/MCRECC *Load Forecast*.
5. Five Year Outage Summary.
6. RUS Form 7 data.
7. Substation transformer ratings.
8. Load projections for each existing and proposed substation with regards to the summer and winter peak demands.
9. Substation Data Sheets.
10. Windmil Version 5.4 circuit model databases with voltage drop calculations for each line section.

BASIC DATA AND ASSUMPTIONS

Design Load – The construction program in the CWP covers a three-year period to serve the 117 MW, January 2008 winter peak. The design load was derived after reviewing the 2005 Load Forecast with the GFR.

Load Allocation – Individual substations were grown at different rates based on the potential for growth in their service areas. The total system design load was attained by allocating each substation's load to its individual line sections proportional to the kWh consumption on each of the line sections. Peak summer and peak winter loading were modeled and analyzed.

Voltage Drop – For the design load, an eight volt drop with one set of downline voltage regulators was assumed to be the maximum allowable drop from the substation to the end of the distribution feeder.

Substation Voltage Regulation – Voltage regulation was assumed for each substation such that a 10% voltage drop could be experienced on the transmission system at peak load and 126 volts could still be supplied to the substation bus.

System Power Factor – System power factor values were assumed to coincide with the requirements set by MCRECC. Capacitor banks can be utilized for power factor correction and system voltage support.

Reliability – In areas where more than a total load of 50 amps is served from a single-phase line, conversion to 2 or 3 phase was considered in order to provide greater system reliability. 2-phase conversions were generally chosen where a single-phase line split into two taps – with a large amount of load being present on only one of the taps. 3-phase conversions were chosen for the more heavily loaded taps and when the single-phase tap split into more than two directions.

Inflation – An annual inflation rate of 3.5% was used in this CWP.

Construction Cost Estimates – Cost estimates for the various distribution equipment and conductor sizes are presented in Tables II-B-1 and II-B-2.

Computer Model of Distribution System – The system is modeled on Version 5.4 of Milsoft Integrated Solution's Windmil analysis software. Downloading monthly billing computer data into the Windmil billing file directory was the framework for building the winter and summer models. Residential and small commercial loads were allocated by the kwh method. Projected models were analyzed for Design Criteria violations.

Economic Conductor Analysis – Economic Conductor analysis includes the consideration of initial construction costs and the associated losses of the selected conductors. For two alternative conductors compared, there is generally a kW load level at which the fixed costs associated with construction plus the variable costs related to line losses are equal for both alternatives.

The following recommendations were generated from the analysis:

1. New single-phase line extensions should be constructed of #2 ACSR.
2. New and converted 3-phase construction should be of 3/0 ACSR for initial loads of less than 2,500 kW and 336.4 ACSR for all greater loads. 336.4 ACSR should also be used near present and future substation areas regardless of the initial load.

The data tables preceding each analysis graph lists the assumptions that were made in each scenario of the conductor analysis. This analysis appears in the Appendices of this report.

FINANCIAL DATA

- ***Cost of Capital = 4.00%***
- ***Inflation = 3.5%***
- ***Present Worth Discount Factor = 4.00%***
- ***Depreciation = 3.21%***
- ***O & M = 5.76%***
- ***Tax & Insurance = 0.34%***

TABLE III-B-1
COST SUMMARY DATA (3.5% Annual Inflation)

DESCRIPTION	ACTUAL 03-04	05/06	06/07	07/08	CWP TOTAL
I. New Customers- 100*					
1. New services constructed	1,312	656	656	656	1,968
2. Cost per Customer	\$1,607	\$1,800	\$1,850	\$1,900	
3. Cost of New Customers	\$2,108,688	\$1,180,800	\$1,213,600	\$1,246,400	\$3,640,800
4. Total Wire Footage	384,454	192,000	192,000	192,000	576,000
5. Mileage	73	36	36	36	108
II. New Transformers- 601					
1. New transformers added	1,505	750	750	750	2,250
2. Cost per Transformer	\$631	\$710	\$735	\$760	
3. Cost of New Transformers	\$949,422	\$532,500	\$551,250	\$570,000	\$1,653,750
III. New Meters- 601**					
1. New Meters added	5,623	5,018	5,018	5,018	15,054
2. Cost per Meter	\$239	\$114	\$114	\$114	
3. Cost of New Meters	\$1,346,364	\$570,213	\$570,213	\$570,213	\$1,710,639
IV. Service Upgrades- 602					
1. Number of Service Upgrades	47	24	24	24	72
2. Cost per Service Upgrade	\$948	\$1,200	\$1,240	\$1,280	
3. Cost of Service Upgrades	\$44,563	\$28,800	\$29,760	\$30,720	\$89,280
V. Pole Changes- 606					
1. Poles Changed	1,355	678	678	678	2,034
2. Cost per Pole Change	\$973	\$1,100	\$1,140	\$1,180	
3. Cost of Pole Changes	\$1,317,826	\$745,800	\$772,920	\$800,040	\$2,318,760
VI. Security Lights- 701					
1. New Security Lights Added	1,008	504	504	504	1,512
2. Cost per Security Light	\$372	\$460	\$476	\$490	
3. Cost of Security Lights	\$374,844	\$231,840	\$239,904	\$246,960	\$718,704
VII. AMR- 702					
1. Hardware/Software/Support		\$112,165	\$112,165	\$112,165	\$336,495
VII. SCADA- 703					
1. Equipment for 5 Substations		\$33,333	\$33,333	\$33,334	\$100,000

*-The number of new connects on the Form 7 is higher than the historical number in the work plan because the Form 7 reports each new customer as a new connect, whereas the work orders count each job; for example one work order with multiple meters such as an apartment complex.

**- AMR Program plus 552 regular meters per year at \$90

SERVICE TO NEW CUSTOMERS – RUS CODE 100

A total of 1,968 new services are anticipated. The projected cost is \$3,640,800.

Cost history and projections are shown in Table III-B-1.

SYSTEM IMPROVEMENTS – RUS CODE 300

LINE CONVERSION NARRATIVES

Note: Refer to the Design Criteria (DC) on Page II-A

Andyville Substation

Code 351

Estimated Cost: \$214,970

Year: 2006

Description of Proposed Construction

Sections 301, 302 & 303 – Replace 8.3 miles of single-phase 6ACWC with single-phase #2 ACSR along Knob Road, Pine Ridge Road and Green Valley Ranch.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

Andyville Substation

Code 352

Estimated Cost: \$88,060

Year: 2006

Description of Proposed Construction

Sections 282 & 289 – Replace 3.4 miles of single-phase 6ACWC with single-phase #2 ACSR along Rhodes Road, Brook Lane and Brandy Springs Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Andyville Substation (continued)

Code 353

Estimated Cost: \$91,410

Year: 2008

Description of Proposed Construction

Section 292 – Replace 3.3 miles of single-phase 6ACWC with single-phase #2 ACSR along Concordia Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

Brandenburg Substation

Code 350

Estimated Cost: \$50,000

Year: 2006

Description of Proposed Construction

Relocate and Replace three-phase conductor in conjunction with the construction of the City of Brandenburg Bypass. This will involve 1.1 miles of three-phase 3/0 ACSR and 0.7 mile of single-phase #2 ACSR.

Reason For Proposed Construction

The line must be relocated due to a state highway project.

Results of Proposed Construction

The new line will be constructed to serve in and around this growth area.

Alternative Corrective Plan Investigated

Since this present line would be interfering with the new highway route, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Cloverport Substation

Code 354

Estimated Cost: \$124,650

Year: 2008

Description of Proposed Construction

Section 151 – Replace 4.5 miles of single-phase 8ACWC with single-phase #2 ACSR along Flood Cut Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

Cloverport Substation

Code 355

Estimated Cost: \$41,550

Year: 2008

Description of Proposed Construction

Section 4915 – Replace 1.5 miles of single-phase 6ACWC with single-phase #2 ACSR along Iron Ore Hill Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Cloverport Substation (continued)

Code 356

Estimated Cost: \$124,650

Year: 2008

Description of Proposed Construction

Section 131 – Replace 4.5 miles of single-phase 6ACWC with single-phase #2 ACSR along HWY 992 from three-phase towards Balltown.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

Cloverport Substation

Code 375

Estimated Cost: \$150,080

Year: 2007

Description of Proposed Construction

Sections 4023 & 138 – Replace 5.6 miles of single-phase 8ACWC with single-phase #2 ACSR on the Tar Springs line.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Cloverport Substation (continued)

Code 392

Estimated Cost: \$222,355

Year: 2006

Description of Proposed Construction

Section 150 – Convert 3.5 miles of three-phase 6ACWC to three-phase 3/0 ACSR to the new Water Station at Cloverport.

Reason For Proposed Construction

Design Criteria (DC) items 1 & 5 will be violated.

Results of Proposed Construction

DC items 1 & 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

No alternative feeds were available to the new water plant. The existing 6ACWC conductor was deteriorated and would have required double regulation in order to have provided adequate voltage.

Custer Substation

Code 357

Estimated Cost: \$41,440

Year: 2006

Description of Proposed Construction

Section 254 – Replace 1.6 miles of single-phase 8ACWC with single-phase #2 ACSR at High Plains.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Custer Substation (continued)

Code 358

Estimated Cost: \$91,410

Year: 2008

Description of Proposed Construction

Section 235 – Replace 3.3 miles of single-phase 8ACWC with single-phase #2 ACSR at Fairfield Buras Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

Falls of Rough Substation

Code 359

Estimated Cost: \$77,700

Year: 2006

Description of Proposed Construction

Sections 629, 126 & 809 – Replace 3.0 miles of single-phase 8ACWC with single-phase #2 ACSR at Panamore Shores/Flo's Hideaway.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Falls of Rough Substation (continued)

Code 360

Estimated Cost: \$75,040

Year: 2006

Description of Proposed Construction

Section 846 – Replace 2.8 miles of single-phase 8ACWC with single-phase #2 ACSR northward along HWY 79S to new three-phase.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

Falls of Rough Substation

Code 361

Estimated Cost: \$45,560

Year: 2007

Description of Proposed Construction

Sections 570 & 827 – Replace 1.7 miles of single-phase 6ACWC with single-phase #2 ACSR at Paradise Acres.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Falls of Rough Substation (continued)

Code 362

Estimated Cost: \$26,800

Year: 2007

Description of Proposed Construction

Section 508 – Replace 1.0 mile of single-phase 8ACWC with single-phase #2 ACSR along Pleasant Run Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

Falls of Rough Substation – Carryover

Code 363

Estimated Cost: \$209,649

Year: 2006

Description of Proposed Construction

Sections 71 & 807 – Convert 3.3 miles of single-phase #2 ACSR to three-phase 3/0 ACSR at Duff.

Reason For Proposed Construction

Design Criteria (DC) Items 1, 4 and 5 are being violated.

Results of Proposed Construction

DC items 1, 4 and 5 will be met. Service reliability will be improved.

Alternative Corrective Plan Investigated

No alternatives were considered for this project since voltage regulators or a refeed would not have corrected all 3 DC violations.

SYSTEM IMPROVEMENTS – RUS CODE 300

Flaherty Substation

Code 364

Estimated Cost: \$62,160

Year: 2006

Description of Proposed Construction

Sections 4032, 245 & 448 – Replace 2.4 miles of single-phase 8ACWC with single-phase #2 ACSR at Big Springs and HWY 2199.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

Fordsville Substation

Code 365

Estimated Cost: \$444,710

Year: 2006

Description of Proposed Construction

Sections 38, 544 & 31 – Convert 7.0 miles of three-phase 4ACWC to three-phase 3/0 ACSR northeastward from the substation along Hwy 261.

Reason For Proposed Construction

Design Criteria (DC) Items 1 and 5 are being violated.

Results of Proposed Construction

DC items 1 and 5 will be met. Service reliability will be improved.

Alternative Corrective Plan Investigated

No alternatives were considered for this project since voltage regulators or a refeed would not have corrected both DC violations.

SYSTEM IMPROVEMENTS – RUS CODE 300

Fordsville Substation (continued)

Code 366

Estimated Cost: \$187,600

Year: 2007

Description of Proposed Construction

Sections 766, 767 & 20 – Replace 7.0 miles of single-phase 8ACWC with single-phase #2 ACSR in the City of Fordsville.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

Fordsville Substation

Code 367

Estimated Cost: \$74,790

Year: 2008

Description of Proposed Construction

Section 50 – Replace 2.7 miles of single-phase 4ACWC with single-phase #2 ACSR along Matthews Lane.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Fordsville Substation (continued)

Code 368

Estimated Cost: \$96,950

Year: 2008

Description of Proposed Construction

Sections 4024 & 46 – Replace 3.5 miles of single-phase 6ACWC with single-phase #2 ACSR on the Hites Falls Line.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

Fordsville Substation

Code 369

Estimated Cost: \$91,410

Year: 2008

Description of Proposed Construction

Section 16 – Replace 3.3 miles of single-phase 6ACWC with single-phase #2 ACSR along the Keown Road and Ridge Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Fordsville Substation (continued)

Code 370

Estimated Cost: \$152,350

Year: 2008

Description of Proposed Construction

Section 13 – Replace 5.5 miles of single-phase 6ACWC with single-phase #2 ACSR on the Grant Dalton and Haynesville Road line.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

Hardinsburg #1 Substation

Code 372

Estimated Cost: \$164,375

Year: 2007

Description of Proposed Construction

Sections 168 & 6603 – Convert 2.5 miles of single-phase 6ACWC to three-phase 3/0 ACSR along New Bethel Road. Section 6603 is fed from Union Star Substation and this project is at the open point between the two substations.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated and a stronger connection between the two substations is necessary.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement and system reliability, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Hardinsburg #1 Substation (continued)

Code 373

Estimated Cost: \$244,375

Year: 2007

Description of Proposed Construction

Sections 715, 751 & 162 – Replace 2.9 miles of Double-Circuit three-phase 4ACWC with three-phase 3/0 ACSR on the Hardinsburg City Lake feeder. 2.0 miles of this project is double-circuit.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

Hardinsburg #1 Substation

Code 374

Estimated Cost: \$116,340

Year: 2008

Description of Proposed Construction

Section 178 – Replace 4.2 miles of single-phase 8ACWC with single-phase #2 ACSR on the Norton's Valley line.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Hardinsburg #2 Substation

Code 376

Estimated Cost: \$152,350

Year: 2008

Description of Proposed Construction

Sections 212 & 155 – Replace 5.5 miles of single-phase 8ACWC with single-phase #2 ACSR on HWY 992 at the end of HWY 105.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

Harned Substation

Code 377

Estimated Cost: \$246,050

Year: 2006

Description of Proposed Construction

Sections 994, 992, 187 & 188 – Replace 9.5 miles of single-phase 8ACWC with single-phase #2 ACSR along Freedom Church Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Irvington Substation

Code 378

Estimated Cost: \$47,090

Year: 2008

Description of Proposed Construction

Sections 408 & 487 – Replace 1.7 miles of single-phase 8ACWC with single-phase #2 ACSR along Newton Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

Irvington Substation

Code 379

Estimated Cost: \$197,250

Year: 2007

Description of Proposed Construction

Sections 733 & 247 – Replace 3.0 miles of three-phase 8ACWC with three-phase 3/0 ACSR along Cemetery Hill Road at Bewleyville.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Irvington Substation (continued)

Code 380

Estimated Cost: \$127,420

Year: 2008

Description of Proposed Construction

Sections 411, 4034 & 409 – Replace 4.6 miles of single-phase 8ACWC with single-phase #2 ACSR on the Dumpline at Guston.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

Irvington Substation

Code 381

Estimated Cost: \$190,280

Year: 2007

Description of Proposed Construction

Sections 519 & 521 – Replace 7.1 miles of single-phase 8ACWC with single-phase #2 ACSR on the Homer Richardson line.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

Irvington Substation (continued)

Code 382

Estimated Cost: \$335,325

Year: 2007

Description of Proposed Construction

Sections 383, 384, 386, 387 & 4931 – Replace 5.1 miles of three-phase 4ACWC with three-phase 3/0 ACSR along Fackler Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since these sections were chosen for aged conductor replacement, no alternatives were considered.

Irvington Substation

Code 383

Estimated Cost: \$53,600

Year: 2007

Description of Proposed Construction

Section 526 – Replace 2.0 miles of single-phase 6ACWC with single-phase #2 ACSR on HWY 477 at Mount Merino and Irvington Heights.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

McDaniels Substation

Code 385

Estimated Cost: \$288,000

Year: 2007

Description of Proposed Construction

Sections 791, 130-125 – Convert 3.6 miles of three-phase 3/0 ACSR with Double Circuit three-phase 3/0 ACSR Ben Johnson school.

Reason For Proposed Construction

Design Criteria (DC) item 2 is being violated.

Results of Proposed Construction

DC item 2 will be met and feeder overloading will be eliminated.

Alternative Corrective Plan Investigated

No viable backfeeds were available to reduce feeder loading.

McDaniels Substation

Code 386

Estimated Cost: \$56,280

Year: 2007

Description of Proposed Construction

Section 568 – Replace 2.1 miles of single-phase 8ACWC with single-phase #2 ACSR along Tucker Holmes Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

McDaniels Substation (continued)

Code 387

Estimated Cost: \$63,710

Year: 2008

Description of Proposed Construction

Section 105 – Replace 2.3 miles of single-phase 8ACWC with single-phase #2 ACSR on the Hidden Valley line.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

McDaniels Substation

Code 388

Estimated Cost: \$8,040

Year: 2007

Description of Proposed Construction

Section 662 – Replace 0.3 miles of single-phase #4 ACSR with single-phase #2 ACSR on the Mills Mercer Camp line.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

SYSTEM IMPROVEMENTS – RUS CODE 300

McDaniels Substation (continued)

Code 389

Estimated Cost: \$85,870

Year: 2008

Description of Proposed Construction

Section 103 – Replace 3.1 miles of single-phase 6ACWC with single-phase #2 ACSR along the Sewsbury Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

Union Star Substation

Code 391

Estimated Cost: \$168,970

Year: 2008

Description of Proposed Construction

Sections 513 & 285 – Replace 6.1 miles of single-phase 6ACWC with single-phase #2 ACSR along Cart Manning Crossing Road.

Reason For Proposed Construction

Design Criteria (DC) item 5 is being violated.

Results of Proposed Construction

DC item 5 will be met and system reliability will be improved.

Alternative Corrective Plan Investigated

Since this section was chosen for aged conductor replacement, no alternatives were considered.

MISCELLANEOUS DISTRIBUTION EQUIPMENT – RUS CODE 600’s

Meters and Transformers – RUS Code 601

Historical data was gathered for meters and transformers and is included in Table III-B-1. 15,054 new meters are projected at a cost of \$1,710,639. The system will be completely fitted with automated meter reading capability during this CWP period.

2,250 new transformers are projected at a cost of \$1,653,750.

Service Upgrades – RUS Code 602

There are 72 service upgrades projected at a total cost of \$89,280. Historical data is included in Table III-B-1.

Sectionalizing – RUS Code 603

Overcurrent analysis is performed on an ongoing basis. Device changeouts, conductor multiphasing and load shifts require overcurrent device purchases. The total projected cost for sectionalizing is \$342,000.

Voltage Regulators – RUS Code 604

Two sets of voltage regulators are projected for the CWP as follows:

CFR CODE	SUBSTATION	SECT/RATING	YEAR	COST
604.1	Cloverport	Sect 4021/219amp	2006	\$32,800
604.2	Flaherty	Sect 932/219amp	2006	\$32,800

Capacitor Banks – RUS Code 605

One set of capacitors are projected for the CWP as follows:

CFR CODE	SUBSTATION	SECT/RATING	YEAR	COST
605.1	Cloverport	Sect150/1200kvar	2006	\$12,000

Pole Changes (All Categories) – RUS Code 606

There are 2,034 projected pole changes in the CWP. The cost for the pole changes is projected to be \$2,318,760. Historical cost data for pole changes may be found in Table III-B-1.

SECURITY LIGHTS – RUS CODE 701

A total of 1,512 new security lights are anticipated. The projected cost is \$718,704.

Cost history and projections are shown in Table III-B-1.

AUTOMATED METER READING – RUS CODE 702

An Automated Meter Reading (AMR) program will during this CWP period. Ten additional substations will be equipped. The total projected cost for hardware/software items is \$336,495.

Substation equipment items for the ten substations are:

Hunt Equipment: \$20,000

Transformer Bank & Pole: \$4,000

Disconnect Switch & Fuses: \$600

Secondary Wire: \$222

Conduit: \$227.40

Fiber: \$400

SubTotal: \$25,449.40 X Ten substations = \$254,494

Miscellaneous Costs

Four Handheld Programmers: \$12,000

Remote Service Switches: \$50,000

Software for Remote Switches: \$2,500

Support: \$17,500

SubTotal: \$82,000

The cost of the meters is represented in Code 601 on page 4 in section I-C. This pilot program will analyze and evaluate the different manufacturers and their various technologies.

Item List

Hardware and Software (Master Station) - \$10,000

Control and Receiving Unit - \$30,000

Outbound Modulating Unit - \$15,000

Inbound Pickup Unit - \$15,000

Meter Modules - \$30,000 (250 @ \$120)

SCADA – RUS CODE 703

Obsolete Supervisory Control and Data Acquisition equipment will be replaced in five substations at a total cost of \$100,000.

EQUIPMENT LIST PER SUBSTATION

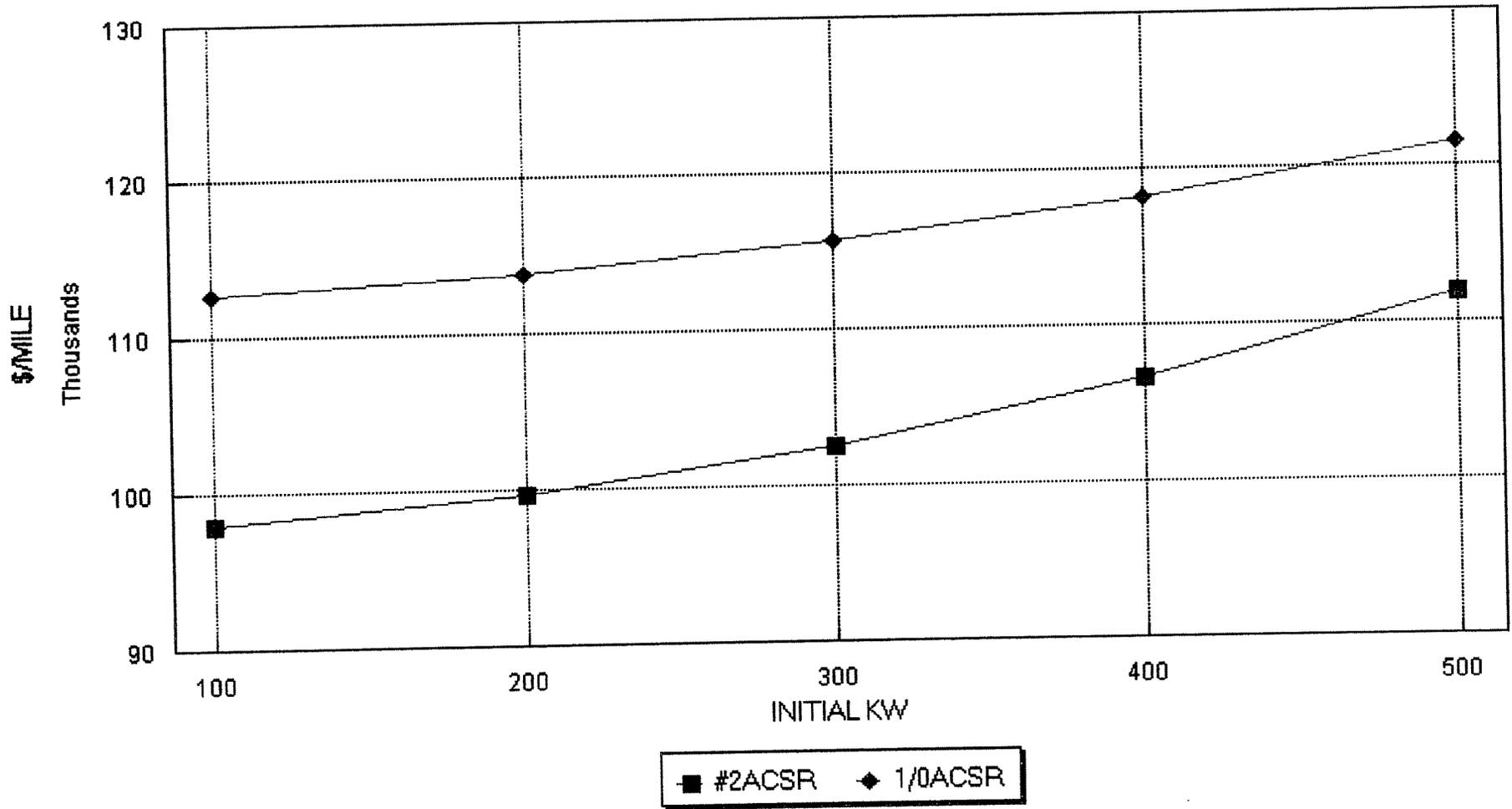
- ION 7550 Meter
- I/O Expansion Card
- ION 7550 Remote Terminal Unit
- Modbus Communication Cards
- Fiber Optic Cable
- NEMA 12 Enclosure
- Converter
- Modbus/DNP Gateway

Meade County RECC - KY 18
 12 kV 1-Phase
 ECONOMIC CONDUCTOR CALCULATIONS

O&M	TAX	INS	INT	\$/KW	\$/KWH	KW
8.97%	0.50%	0.50%	4.00%	7.37	0.020	100
RMO	RAT	KWI	KWHI	LGR	INF	m
12	0.0%	2.00%	2.00%	2.00%	3.50%	20
LF	PF	CF	N	KV	P	
49.0%	95.0%	94.0%	0.6	7.2	1	
CONDUCTOR	2ACSR	1/0ACSR				
COST/MI	\$25,900	\$29,900				
OHMS/MI	1.410	0.885				
TCOST/MI	\$175,884	\$202,545				
PWCOST/MI	\$97,843	\$112,645				

ECONOMIC CONDUCTOR CALCULATIONS

Meade Co RECC 12 KV 1-Phase

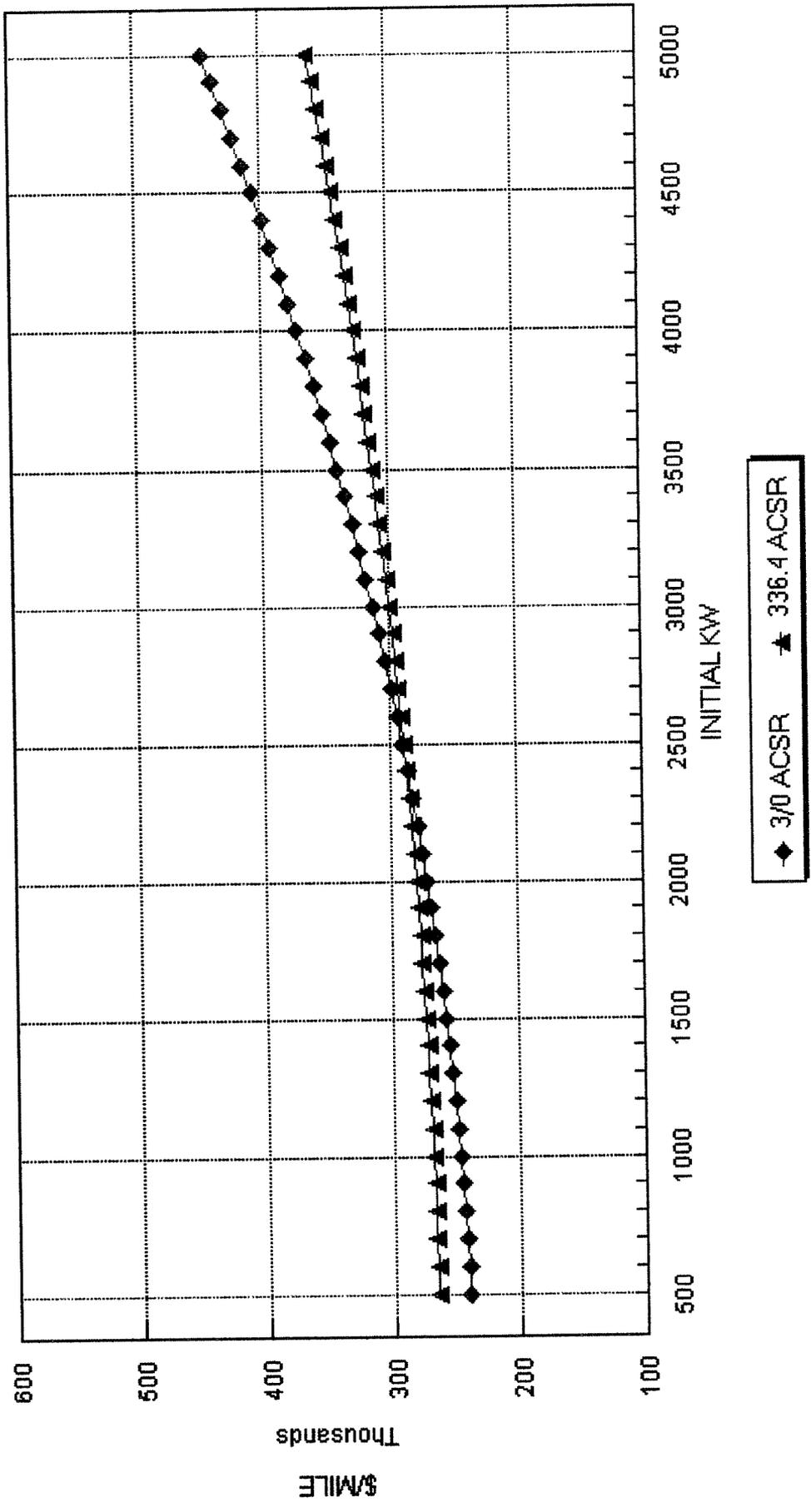


Meade County RECC - KY 18
 12 kV 3-Phase
 Economic Conductor Calculations for Conversion

O&M/Dep.	TAX	INS	INT	\$/KW	\$/KWH	KW
8.97%	0.50%	0.50%	4.00%	7.37	0.020	500
RMO	RAT	KWI	KWHI	LGR	INF	m
12	0.0%	2.00%	2.00%	2.00%	3.50%	20
LF	PF	CF	N	KV	P	
49.0%	95.0%	94.0%	0.6	7.2	3	
CONDUCTOR		3/0ACSR	336.4 ACSR			
COST/MI		\$63,530	\$70,500			
OHMS/MI		0.592	0.278			
TCOST/MI		\$432,454	\$477,745			
PWCOST/MI		\$240,633	\$265,706			

ECONOMIC CONDUCTOR CALCULATIONS

Meade Co. RECC 12 kV 3-Phase CONVERSION



Meade County RECC Annual Loss Cost Calculations

Month	kWh	kW	kW Loss	Load Fact	Loss Fact	kWh Loss
JANUARY	46,825,840	101,467	0.99	0.62	0.42	312
FEBRUARY	40,677,550	83,742	0.68	0.72	0.55	252
MARCH	32,928,220	71,610	0.49	0.62	0.42	154
APRIL	27,400,192	67,451	0.44	0.56	0.36	113
MAY	31,426,190	69,065	0.46	0.61	0.41	141
JUNE	33,737,181	77,703	0.58	0.60	0.40	169
JULY	36,893,891	83,215	0.67	0.60	0.39	196
AUGUST	34,919,793	81,489	0.64	0.58	0.37	177
SEPTEMBER	30,388,320	77,558	0.58	0.54	0.34	140
OCTOBER	25,765,647	49,107	0.23	0.71	0.53	92
NOVEMBER	30,557,286	67,331	0.44	0.63	0.43	137
DECEMBER	45,912,240	101,824	1.00	0.61	0.41	302
TOTAL	417,432,350	931,562	7.20	7.40	5.04	2184

KW CHARGE = \$7.37/KW

\$7.37 x 7.20(KW LOSS)=

\$53.09

ENERGY = \$0.020/KWH

\$0.020x 2184(KWH LOSS)=

\$43.68

TOTAL LOSS COST/KW PEAK

\$96.77

"N" = 7.20/12 = 0.60